Out-of-pocket Payments in Estonia: an Object for Concern?

HSF Working Document

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ABSTRACT

1. In Estonia, the bulk of the population is covered by social health insurance. Twenty percent of health expenditure is private and out-of-pocket payments have been increasing rapidly in real terms since the mid-nineties.
2. The survey data used in this study shows that the percentage of households that face relatively high out-of-pocket health payments (more than 20% of their non-subsistence spending) increased from 3.4% in 1995 to 6.3% in 2001 and 7.4% in 2002.
3. The proportion of households falling below the poverty line as a result of health spending increased from 1995 (1%) to 2001 (1.3%) and remained at a similar level in 2002.
4. The study also shows that drugs are the highest source of out-of-pocket payments for the poor who are the most at risk of falling in financial hardship because of out-of-pocket payments.
5. Finally, the study gives good reasons to believe that elderly chronic patients who are member of poor households are the most vulnerable.
6. In other words, this study takes steps towards better understanding the limits of the financial protection granted to citizens in Estonia. Changes in co-payment policy introduced in 2003, which are not reflected in our data, led to a further increase in out-of-pocket payments and may have further deteriorated the situation to which we hope to draw attention.

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Definitions

Out-of-pocket health payments (OOP). *Out-of-pocket health payments refer to payments made by households at the point of receiving health services. Typically these include doctors' consultation fees, purchases of medication, hospital bills as well as informal payments. Although spending on alternative and/or traditional medicine is included in out of pocket payments, expenditure on health-related transportation and special nutrition are excluded. It is also important to note that out-of-pocket payments are net of any insurance reimbursement.*

Subsistence need or poverty line*. It is defined here as the food expenditure of the household with the median food share of total household expenditure*[1]*. Based on the data, the subsistence need or poverty line was set at 783 Kroon in 1995, 1171 Kroon in 2001 and 1202 Kroon in 2002 per person per month*[2]*.*

Capacity to pay (CTP)*. Household capacity to pay is measured as a household's total expenditure minus the household's subsistence need.*

Catastrophic expenditure*. When the medical expenses of one or more of their members are high in relation to their capacity to pay, households must reduce their expenditure on other necessities for a period of time. For cross-country comparisons, WHO has set a catastrophic expenditure threshold at the point where out-of-pocket payments are equal to or above 40% of a household's capacity to pay. However, in Estonia, the results show that less than 2% of households incurred catastrophic expenditure using this definition, so the report focuses on households incurring high health payments defined as equal to or above 20% of a household's capacity to pay.*

Impoverishment*. A household is impoverished by health payments when it falls below the poverty line defined above after paying for health services trough out-of-pocket payments.*

Expenditure/income quintiles. *Households were divided into five groups according to their per capita expenditure to reflect differences in income. The first quintile represents the poorest households and the fifth quintile the richest.*

[1] K Xu, DB Evans, K Kawabata, et al. (2003): Household catastrophic health expenditure: a multi-country analysis. The Lancet. Vol(362):111-117

CJL Murray, K Xu, DB Evans, K Kawabata, J Klavus, P Hanvoravongchai, R Zeramdini. (2003): Assessing the distribution of household financial contributions to the health system: concepts and empirical application. Chapter 38 in: CJL Murray, DB Evans, editors. Health Systems Performance Assessment: Debates, Methods and Empiricism. Geneva: World Health Organization; 2003.
K Xu, J Klavus, K Kawabata, DB Evans, P Hanvoravongchai, JP Ortiz de Iturbide, R Zeramdini, CJL Murray.(2003): Household health system contributions and capacity to pay: definitional, empirical and technical challenges. Chapter 39 in: CJL Murray, DB Evans, editors. Health Systems Performance Assessment: Debates, Methods and Empiricism. Geneva: World Health Organization.

[2] By comparison, the poverty line calculated in other research in Estonia for years 2001 and 2002 is 1538 Kroon and 1593 Kroon per month. The direct poverty lines remain above but closer to those used here 1230 Kroon for 2001 and 1274 Kroon in 2002 (Social Sector in Figures 2003. Ministry of Social Affairs, Tallinn 2003). As a consequence of these different measures used, this study could underestimate the poverty impact of out of pocket payments.

Introduction

One of the goals of a health system is to protect households from the risk of becoming impoverished as a consequence of their health care expenditures. Experience shows that out-of-pocket payments, made at the time of utilisation, are one of the main reasons why the objective of financial risk protection is not achieved in many health systems and countries[3]. Indeed, out-of-pocket payments can lead to individuals having to expend high amounts compared to their available income, and some households are forced to borrow and/or pushed into poverty as a result. This policy brief describes out-of-pocket payments in Estonia and their distribution across households in order to assess the extent to which this issue should be a concern. Based on survey data, and using a WHO methodology, the report addresses the following questions: (1) Who pays how much and for what kinds of health services? (2) How do these payments impact on a household's financial situation? (3) What kinds of households are more likely to face catastrophic expenditure and for what kind of services? Identifying of the nature of catastrophic risk could help target policy responses

Context

This study assesses the situation in the mid-nineties and again in 2001 and 2002.

Over that period, total expenditure on health increased in real terms (+10%) albeit at a lower rate than GDP. In fact, the share of GDP spent on health decreased from more than 6 to 5% between 1996 and 2002, with government health spending falling from 6% to 4 % of GDP[4].

Over that period, Figure 1 shows that while total public expenditure was growing roughly in pace with the GDP, public expenditure on health slightly decreased in real terms. This reflects a decline in the share of total public spending devoted to health from 16% in 1996 to 11% in 2002. The increase in total health expenditure was therefore driven by private expenditure which increased by nearly 80% in real terms. In 1996, 13.3% of the health expenditure was paid privately (mainly out-of-pocket); the proportion reached 19% in 2001 and 20% in 2002. Although the out-of-pocket share increased rapidly, Estonia's 2002 figure still compares quite favourably with, for example, Latvia (46%) and Lithuania (27%) in that same year. In nominal terms, out-of-pocket payments represented 737 Kroon (47 Euro) per person per year in 2001 and 1039 Kroon (66 Euro) in 2002.

In Estonia, 94% of the population is covered by Estonian Health Insurance Fund, including children under 18 and pensioners who are covered statutorily. The uninsured have to pay directly for most of their non-emergency care. They are typically non-working adults and they tend to be poorer than the rest of the population. Between the mid-nineties and 2002, their proportion in the population remained stable.

For the rest of the population, out-of-pocket payments consist in statutory co-payments, direct payments for goods and services excluded from the benefits package or to non-EHIF contracted providers, and some informal payments.

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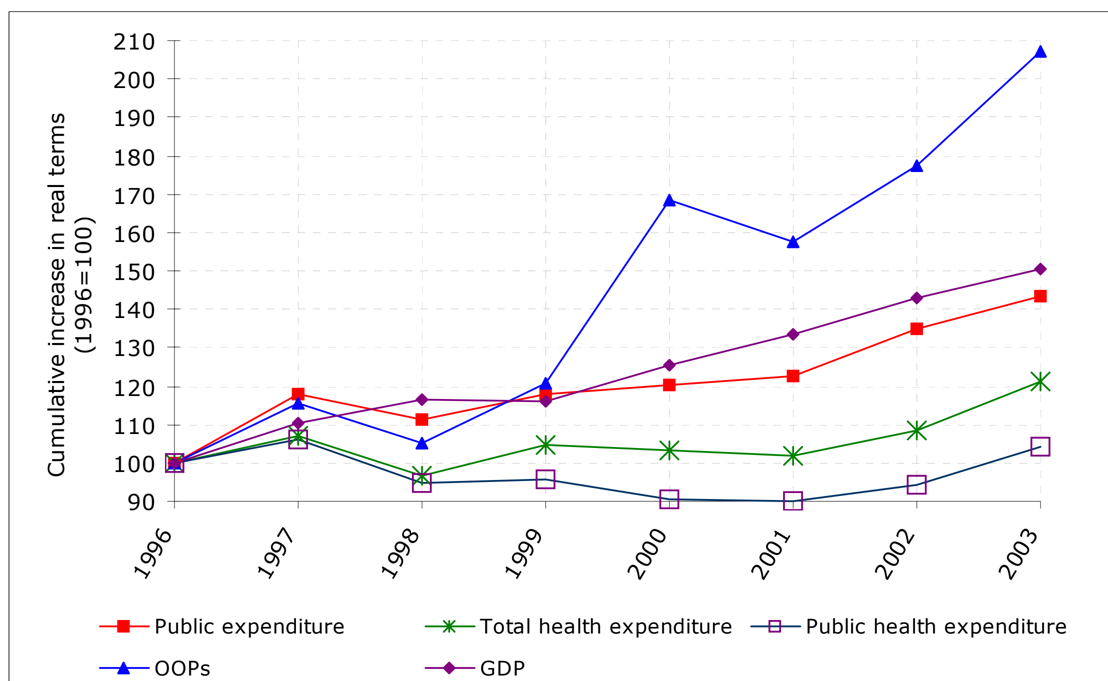
[3] Xu K, Evans DB, Kawabata K, Zeramdini R, Klavus J, Murray CJ. (2003) Household catastrophic health expenditure: a multicountry analysis. Lancet. Jul 12;362(9378):111-7.

[4] Data are only available from 1996 on, and may not be entirely reliable for 96 and 97, as the official NHA system was launched in Estonia in 1998.

In 2001, individuals spent mostly on pharmaceuticals which accounted for approximately 54% of out-of-pocket payments and dental care (25%). Out patient services represented about 4% and the inpatient services' proportion was also low[5]. NHA data for 1995 is not available, but the 1999 structure is comparable to that of 2001, which tends to confirm that pharmaceutical and dental care have been the driving force behind the increase in out-of-pocket payments.

Figure 1 Changes in health expenditures by category, GDP and total public expenditures, 1996=100



Source: Ministry of Social Affairs and State Statistical Office, authors' own calculations

The increase in private expenditure over the period probably resulted from a combination of different factors. First, there were some changes introduced to the policy on user charges, which tended to increase over time, mostly for pharmaceuticals. Currently, outpatient prescription drugs on a positive list are subject to a co-payment of EEK50 (€2.5) per prescription beyond which 50% of the price is reimbursed up to a maximum of EEK200 per prescription. A list of drugs for chronic illnesses is subject to a lower co-payment and can be reimbursed at a rate of 75% (90% for children and the elderly) or 100%. Since 2003, additional financial protection has been provided to those who face high pharmaceutical expenditure: the HIF reimburses 50% of a yearly cost between €383.40 and €639.00, and 75% beyond, up to a limit of €1278.00. Any additional cost is not covered. Overall, the structure of the reimbursement scheme did not change since the mid-nineties, a combination of an increase in the prices of pharmaceuticals, marginal changes in the reimbursement policy, changes in the positive list concur to explaining its current high proportion in out-of-pocket expenditure. In addition, although no data are available, there are reasons to believe that the consumption of over the counter drugs has increased over time. Co-payments for other types of care did not change much between 1995 and 2001.

[5] National Health Accounts 2001. Ministry of Social Affairs, Tallinn 2002 (in Estonian)

Another explanatory factor for the increase in out-of-pocket spending is the development of the private sector where fees are unregulated and providers are allowed to establish their own charge rates. This is particularly true for dental services, but also, and this is not well documented, for other ambulatory services.

Interacting with the first and possibly the second of these factors is, as noted above, the decline in the real level of government health spending. It is likely that the changes in co-payment policy have shifted a greater responsibility for funding directly to patients. In addition, the growth of demand and spending for privately provided care may have also been stimulated by the decline in public spending. And of course, another likely explanation for the rise in real private health spending was the growth in real incomes of the Estonian population, on the assumption that the demand for health care was income elastic.

Data Source

Data used in this report are from the Household Budget Surveys of 1995, 2001 and 2002. These nationally representative surveys are conducted by the State Statistical Office of Estonia[6].

The secondary analysis presented here was prepared by WHO experts for 1995 and for 2001 and 2002, by an Estonian expert, commissioned and financially supported by WHO on behalf of the Ministry of Social Affairs[7]. The methodology is provided by WHO.

Results of analysis

General trend between 1995 and 2002

According to the surveys, in 1995, households spent on average 58 Kroon per month out-of-pocket for health services and 152 Kroon in 2002. Health payments also increased in relative terms: in 1995, they represented on average 2.2% of total household monthly expenditure and 4.1% of household capacity to pay (non-subsistence spending). These figures increased respectively to 3.2% and 5.0% in 2002, which implies that the health spending is increasing faster than households' other consumptions. Conversely, as shown above, health spending by *government* increased more slowly than other types of public expenditures.

What's the overall impact?

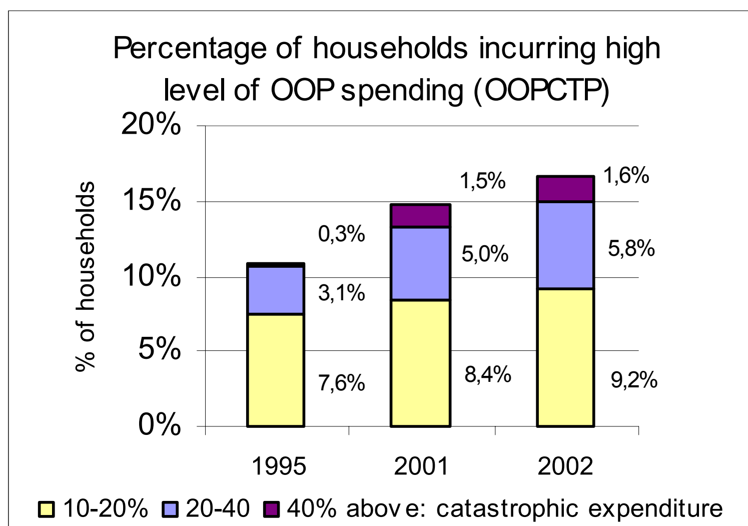
In 1995, 0.3% of households had to spend at least 40% of their non-subsistence spending on care. In 2001, 1.5% of households faced such catastrophic expenditure and 1.6% in 2002. Figure 2 displays the share of households who spent a proportion ranging between 20 and 40% as well

[6] Household Living Niveau 2001. Statistical Office of Estonia, Tallinn 2002; Household Living Niveau 2002. Statistical Office of Estonia, Tallinn 2003; Household Budget Survey 2002. Methodological Report. Statistical Office of Estonia, Tallinn 2003

[7] Draft report "WHO Fairness of Financial Contribution. Out-of-Pocket Payments Analysis for Estonia for the years 2001 and 2002" Kadri Ruusmaa, Tallinn May 2004.

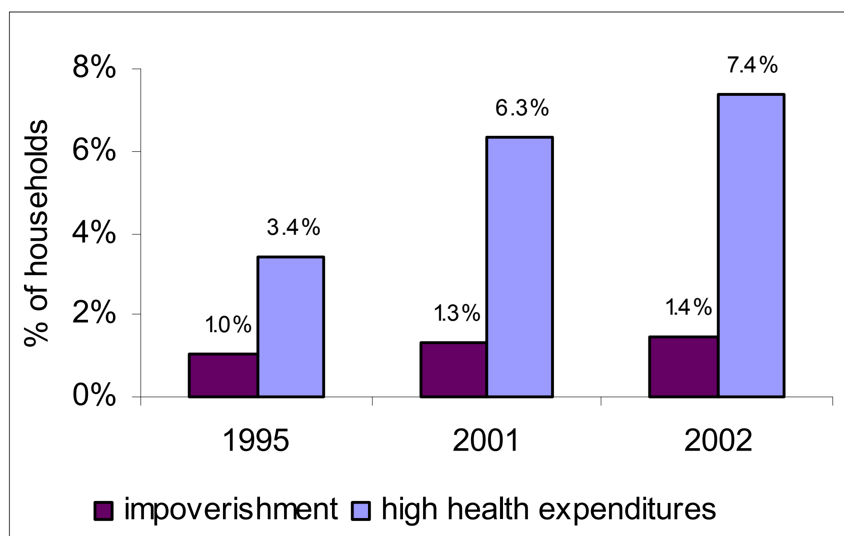
as between 10 and 20% of their capacity to pay on health at the different points in time. The size of all groups increased, which shows that having to face health payments that are high with respect to one's capacity to pay is becoming more of an issue over time in Estonia. For instance, the proportion of households spending more than 20% of non-subsistence spending on health increased from 3.3% to 7.4% over the period.

Figure 2 Percentage of households incurring high level of OOP spending



The consequences of having to pay large sums for care depend on the households' initial financial situation. A conventional and powerful way of illustrating the impact of out-of-pocket payments is to determine what proportion of the population becomes poor because of them. In general the percentage of households with high health expenditures (above 20% of a household capacity to pay) and impoverishment increased from 1995 to 2002. In 1995, 1% of the population fell under the poverty line as a result of health care payments and the proportion increased to 1.3% and 1.4% in 2001 and 2002 respectively (Figure3). In other words, our results show that in 2002, approximately 42 000 households faced high health expenditure and approximately 8 200 were pushed into the poverty because of out-of-pocket health payments.

Figure 3. Proportion of households with high health payments (20% above) and impoverished



To which extent does this impact depend on the household's initial financial situation?

In absolute terms, nominal out-of-pocket health payments vary dramatically across income groups for all three years (figure 4-a). In fact, the level of out-of-pocket expenditure increases when income rises, as richer people spend more on health out of their pocket. However, comparatively small expenditures for health can have a great impact on a poorer household's situation. Indeed, comparing out-of-pocket expenditure to total expenditure (OOPEXP figure 4-b), or to non subsistence expenditure (figure 4-c), shows a very different picture. In 1995, the rich tended to spend relatively more on health than the poor (figure 4-b), which means that out of pocket payments were slightly progressive, but in 2001 and 2002 the situation was reversed and payments had become regressive when compared to total expenditure. When comparing out of pocket expenditure relative to household capacity to pay, the lower income groups always spent a larger share on health than the higher income groups, and this difference increased over time (figure 3-c).

In a nutshell, these graphs show that over the period, not only did the amount of out-of-pocket payment increase but the burden became heavier for the poorest part of the population and lighter for the richest part, indicating that the financing system became more regressive.

Figure 4. Who pays for health services?

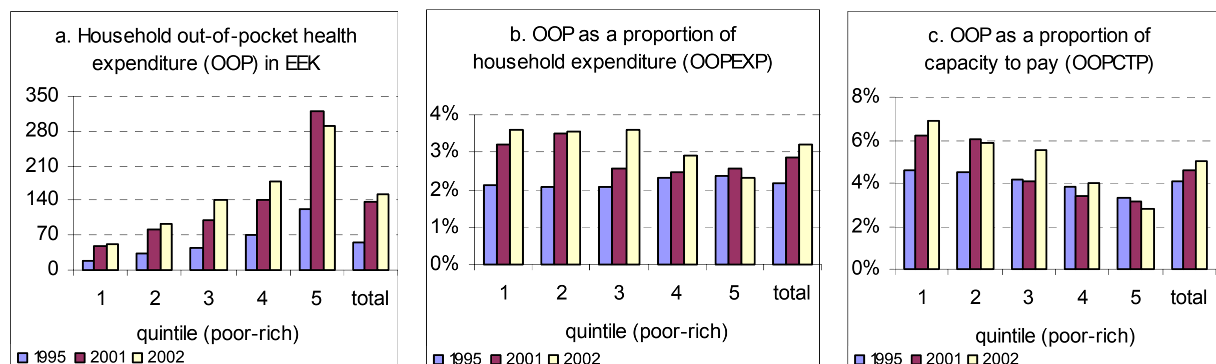
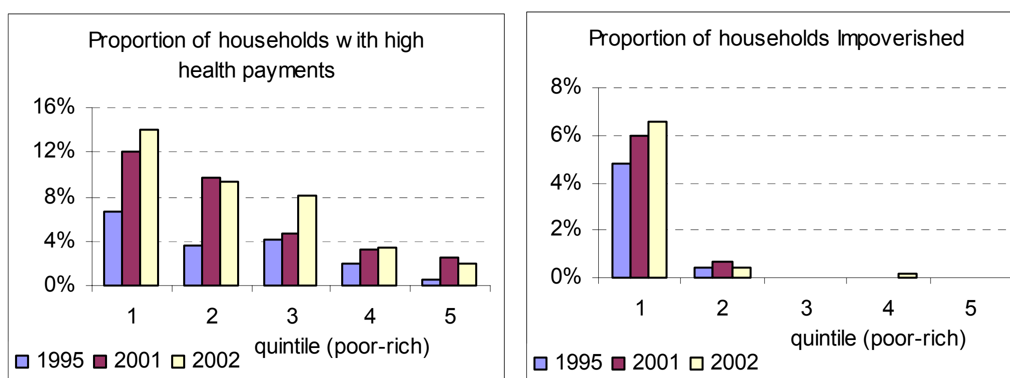


Figure 5 confirms that facing high health payments (above 20% of a household's capacity to pay) and becoming poor as a result of health expenditure is more likely to happen to those who are less favoured. Most of the impoverishment occurred in the first quintile and some in the second quintile for all the three years. High health payments occurred in all income quintiles, but the poorest quintile had the highest figure in all three years.

Figure 5. Percentage of households with high health payments and impoverished



What do households spend on?

Looking at the structure of the expenditure across types of care for different income groups gives some insight into what is happening. Four broad classes of expenditures are identified (a) out-patient services (including dental care), (b) in-patient services, (c) medicines (both prescription medicines and over the counter medicines), (d) medicinal products, appliances and devices.

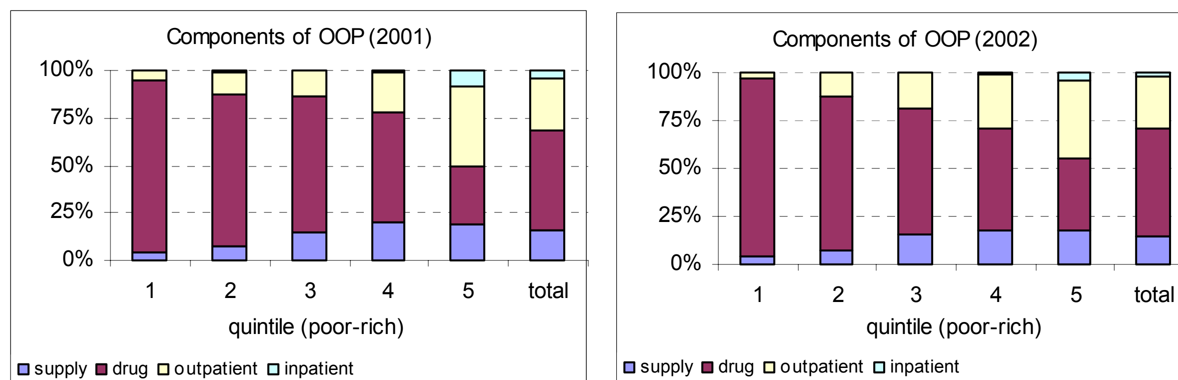
The largest proportion of out-of-pocket expenditures was spent on drugs in both 2001 and 2002 (this information is not available for 1995). According to the survey data, drugs represented 56%

of total out-of-pocket expenditures[8] in 2002, 4% more than in 2001. Outpatient services were the second largest item of out-of-pocket expenditures (28 %)[9]. Very little was spent for inpatient care, which is largely covered by public insurance.

The structure of this expenditure varies across income quintile and appears quite stable. The results clearly show that the poorest groups' out-of-pocket payments are spent almost exclusively on drugs and increasingly so (figure 6). The rich spend relatively more on outpatient services. A combination of factors could explain these findings, namely that (a) the higher income groups used more private services and dental care, which represents the largest part of out-patient expenditure; (b) the low income groups forewent needed outpatient health services or could not obtain the whole course of treatment.

Exploring these assumptions requires a more detailed analysis. Still, for the poorest segments of the population, our analysis shows that expenditure on medicines is the main driving force of out-of-pocket payments and impoverishment, and this also points towards possible policy responses. In any case, it is worth mentioning that the health financing system provides excellent financial protection against the costs of inpatient care for all Estonians, regardless of their income.

Figure 6. What does a household spend on in 2001 and 2002 by income quartiles?



[8] This includes both prescription drugs and over the counter drugs. The exact proportion of each is difficult to estimate from survey used. General sales statistics show that prescription medicines accounted for about 75% of the entire market (including compensation from the insurance fund and out of pocket payments), but similar data from household level are lacking.

[9] Out-patient care includes both out-patient visit fees and other payments, including for dental care, covered by patients. The surveys used for this study do not enable us to distinguish between both at the household level. But the Estonian National Health Accounts report from 2002 suggests that about 80% of "outpatient services" (drugs excluded) are in fact dental care (National Health Accounts 2002. Ministry of Social Affairs, Tallinn 2003 (in Estonian)).

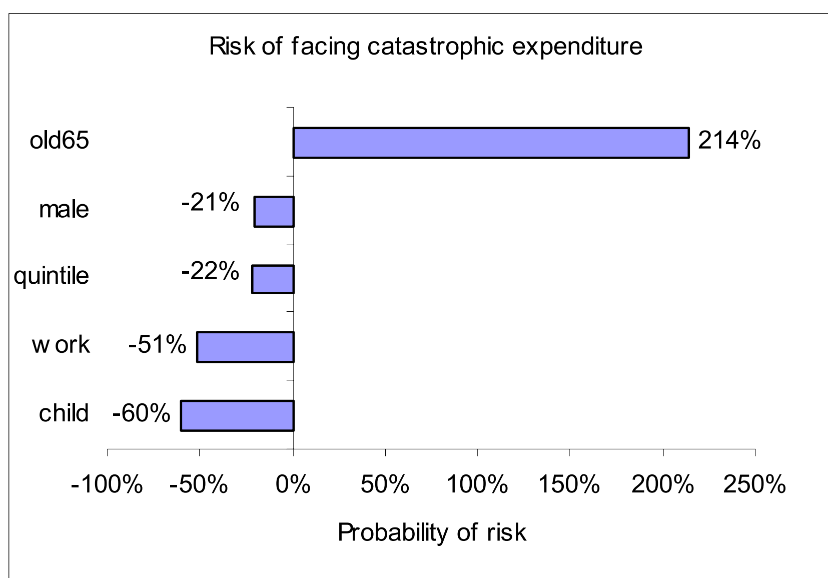
Who is more likely to be affected?

In order to better understand who is most affected by large out-of-pocket expenditure, a Multiple Logistic regression was used. It shows which socio-economic characteristics of households influence high health payments (above 20% of a household's capacity to pay), holding the effects of all other indicators constant.

The results indicate that households with higher income, with a head who is male and currently working have a lower probability of having high health payments. The "protective effect" of having children under 16 years suggests that they were not a frequent source of high health expenditures compared to adults and older people. On the other hand, households with senior members (above 65 years old) are more likely to face high health payments. Variables on urban/rural locations and education level of the household head were also tested in the model but none of them was statistically significant.

Figure 6 shows the risk factors of high health payments in more details. A positive number means the factor increases the risk while a negative number indicates a decrease in the risk of occurring high health payments. For example, holding all the other factors constant, households with senior members were 214% more likely to have high health payments than households without senior members, while a household with its head working had a 51% lower risk than those whose head is unemployed. A similar analysis of the factors that affect the probability of being impoverished because of health care payments confirm that old age is associated with a higher risk and work with a lower one, despite the fact that both employed persons and pensioners are equally covered by the Health Insurance Fund.

Figure 7. Different socioeconomic factors influencing high payments in 2002



Conclusions and Discussion

Bearing in mind some limitations of this study, we can nevertheless draw some conclusions.

First, compared with many middle-income countries of the region, and in particular the other two Baltic countries, Estonia relies relatively less on out-of-pocket payments, and the health financing system provides adequate financial protection to the vast majority of the population. Still, our results show clearly that this financial protection has eroded over the period under consideration, particularly for poorer Estonians. Is this really a problem? We believe that there is sufficient cause for concern, particularly with regard to the trend, to bring this now to the attention of policy makers.

Second, the study shows that drugs are the highest source of out-of-pocket payments for those who are the most at risk of experiencing financial hardship because of out-of-pocket payments. Furthermore, the data suggest that elderly chronic patients who are member of poor households are the most vulnerable. Unfortunately, some important variables are not available in this study, such as health service needs and utilisation, along with the health insurance status. Lack of health insurance coverage can not be an explanation for the heightened risk of impoverishment for the elderly because all persons of pensionable age are automatically covered. So the problem has to do not with the presence of insurance coverage but rather the *depth* of that coverage (i.e. the extent to which patients have to co-pay for various services and especially drugs) and the absence of targeted exemptions from co-payments for the poor elderly. Whether the additional protection set up in 2003 for out-of-pocket pharmaceutical expenditure has led to an improvement of the situation still needs to be evaluated.

Third, in 2003, the co-payment policy was changed in many respects: introduction of reference prices for pharmaceuticals, explicit rules for cost-sharing on services included in the benefits package, regulation of visit fee ceilings (for primary health care home visit fee, out-patient visit fee, and in patient bed day fee), exclusion of adult dental care from benefit package (and introduction of monetary benefits), etc. While we cannot determine a causal link, survey data show that out-of-pocket expenditure per capita increased by more that 30% in 2003. In this context, it is possible but doubtful that the burden of out-of-pocket payments shifted dramatically in a pro-poor direction. We suggest that further analysis be undertaken to assess the distribution of these increased private payments and any impact that the co-payment policy changes may have had.

Fourth, and closely related to the increase in patient obligations for co-payments, is that the trends in Estonia show that, in simple terms, as government spending on health declined in both real terms (slightly) and as a share of total government spending (significantly), the role of out-of-pocket spending has increased. The burden of this spending has fallen most heavily on the poor. While the solution to the problem of improving financial protection for the poor will not come just from increasing government health spending, it is likely that the success of reforms to improve financial protection, e.g. targeted exemptions from co-payment, will have to be supported by increased public spending in order to "purchase" this extra protection for the poor.

Finally, we have a methodological comment. The tool we used to measure the extent of the problem is *contextualized* for Estonia": we look at "high" out-of-pocket expenditure (20% of capacity to pay) rather than "catastrophic" (40%) ones. On the other hand, our poverty line is higher than the national one, and therefore we may be underestimating the impact of out-of-

pocket payments on poverty. In other words, the monitoring tool used here was adapted to reflect differing value judgments on what constitutes a problematic situation. Such flexibility with regard to different country contexts and value assessment is an important asset for a monitoring tool.